

# Arachne

## WHAT IS NEW IN ARACHNE v2.0

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# 1 Purpose of this document

This document contains an overview of all changes implemented in Arachne version v2.0 compared to the previous version v1.2.4.

The changes are described in 2 different chapters:

- one chapter with new functionalities;
- one chapter with changes / improvements in existing functionalities.

The scope of this document is to offer a short summary of these changes. For a detailed description of the existing and the new functionalities, we refer to the user documentation.

## 2 New in Arachne

### 2.1 Historical data

The risk calculation process runs weekly and can impact all risks linked to your projects and contracts. In version 1.2.4 only the most recent calculations are available, previous results and details are not kept. In version 2.0, a logging of the following information is available:

- all calculated risk scores (overall, main categories, individual risk indicators);
- all details used to calculate the risk scores;
- data deliveries.

This allows the user to

- retrieve the evolution of the risk scores (global and individual) of a project, contract, beneficiary;
- retrieve the risk indicator scores and details applicable on a specific date;
- retrieve statistics and the evolution of the global risk scores on operational programme level.

The historical information can be consulted in:

- the redesigned Welcome window (see section 3.1);
- the new 'Historical data' screens (see user manual for more information);
  - Historical risk indicators
  - Risk evolution
  - Data delivery Statistics
- new Case Management statistics (see section 3.4);
- new detail pop-up window (see section 3.9).

### 2.2 Upload data

XML data files can be uploaded directly into the Arachne database via the Arachne interface instead of uploading the files via SFC. Dedicated Arachne users will have the possibility to do so. All other users will have the possibility to see the status of the uploaded data files for the operational programmes for which they have access in their profile. See user manual for more information.

### 2.3 Alert me function

This functionality allows Arachne to send the user an email informing him about important changes in the indicators for the specific OP he is monitoring. See user manual for more information.

## 2.4 Enriched global risk calculation information

The information on how the overall score is calculated and how the 7 main group category scores are calculated is enriched with all information necessary to explain how these scores are calculated. These new pop-up windows are available on the 4 dashboards.

## 2.5 New project status 'cancelled'

In Arachne version 1.2.4, it is not possible to identify projects as being cancelled. The only statuses which are supported are 'open' and 'closed'.

In version 2.0, a new status 'cancelled' makes it possible to identify the projects which have been started but where stopped or completely cancelled.

## 2.6 Additional Public procurement type values

Additional public procurement types are defined: 'competitive dialogue' and 'direct award'. These procurement values make it possible to fine-tune the peer groups for the procurement risk calculations.

## 2.7 Surrounding view of a person

In Arachne version 1.2.4 you can retrieve a 'surrounding graph' of a project or a company.

In version 2.0 it is possible to retrieve the 'surrounding view' also for a person. This surrounding view contains:

- The links to all companies in which this person has an official current role and the eventual links of these companies to the projects in Arachne.
- The links to all projects in which the person is defined as related person or where there is a contract linked in which he is identified as key expert.

## 2.8 User Management Module

A separate web-based user management module will give local administrators the rights to manage the Arachne user accounts for the operational programmes for which they are defined as local admin.

## 3 Improvement of existing functionalities

### 3.1 Migration to a new XML format

Data must be uploaded in Arachne using XML data files. Together with the new release 2.0 of Arachne a new XML format and a new corresponding XSD scheme has been included.

This new XML format will optimize the XML file; the values become language independent, specific types have been optimized and small corrections on consistency have been made.

Note that the current version (V1.34) of the XML/XSD is also supported in the new version of Arachne. Migration from V1.34 to V2.0 is recommended by not mandatory.

A complete description of the new XML/XSD version and a description of the all changes between version 1.34 and 2.0 is available in other documents.

### 3.2 Arachne Welcome window

In Arachne version 1.2.4 the welcome window displays a static set of dashboards.

The new welcome window in Arachne version 2.0 has a complete new lay-out. Selection of most of the criteria is dynamic and new panels have been added allowing tracing the evolution of potential risks. Not only the highest risks but also the highest increase and decrease of risks can be followed-up. See user manual for more information.

### 3.3 Improve automatic disconnection method

In Arachne version 1.2.4, disconnection from Arachne occurs automatically after 30 minutes without activity. This provokes all information displayed on the screens to get lost.

The automatic disconnection procedure has been optimized in Arachne version 2.0. The connection (and all the related open screens) will remain unless the server has been rebooted or restarted or when a new version of the database has been installed (weekly).

### 3.4 Case Management

The case management system of Arachne has been thoroughly improved and reviewed.

- Guest and Follower profile has been merged. Each user will be able to create cases and to add comments. Only the user to whom the case has been assigned can propose the closure of the case.
- Unlimited number of supervisors per OP.
- It's possible to re-open cases and to create multiple cases per project or contract.
- Completely new, user-friendly home page with advanced search possibilities.
- The 'revised score' has been replaced with a white or a black flag.
- New case management statistics screen enabling to follow-up the evolution of cases.

### 3.5 Arachne dashboard limitation of 200 listed items

In Arachne version 1.2.4 users can retrieve maximum 200 projects, contracts... in the dashboards.

In version 2.0, the paging navigation gives the user the possibility to show all the items without any limitation.

### 3.6 Risk calculation for closed projects

In Arachne version 1.2.4, risks are (re-)calculated weekly for all projects, even closed projects.

In version 2.0, risk indicator and risk category scores will not be re-calculated for projects having a status equal to 'cancelled' or for projects having a status equal to 'closed' and for which the end date of the project is more than 6 months in the past, unless it's the first time that the project is sourced to Arachne or that new project related data is sourced (invoices, contracts, ...).

### 3.7 Changed risk indicator calculation rules

In Arachne version 1.2.4, many risk indicators are only calculated for specific project types.

In version 2.0, indicators are always calculated (for every project type) when the needed data is available. Moreover, many risk calculation rules for individual risk scores as well as overall score calculations have been adapted or fine-tuned. Some important changes in Arachne v2.0:

- Fine-tuning of some risk scoring rules (increased granularity, use of a reference year and a validation period).
- New aggregation rules for determination of the risk category scores.
- The merging of some indicators. F.i. 'Project total cost (declared to the EC) / Turnover of the beneficiary' and 'Project cost / Beneficiary turnover (project level)' have been merged with 'Project cost/ annual turnover of the beneficiary'.
- The scope of some risks has been enlarged. F.i. for concentration risks the calculation rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.

For more information about the changed risk calculation rules, see Annex 4.1.

### 3.8 Enrich the entity type list

The list of the possible values of an entity type has been enriched. Now, only the values 'Public', 'Private' and 'Unknown' are supported. The list of values which are supported corresponds to the list of Orbis entity types (f.i. 'industrial companies', 'financial companies', 'public authorities/states/governments', ...).

### 3.9 Detailed risk indicator pop-up window

In Arachne version 1.2.4, some information regarding the individual risk indicators is available via a standard pop-up window.

In version 2.0, each individual pop-up window contains all the information which is relevant for the calculation of the risk, including the data which generates the risk (which contracts, expenses, ...), a description of how the risk is calculated, a link to the calculation of the peer group average (if applicable), ... .

### 3.10 Entity role in graphs

Some of the graphs show the projects, the relations with beneficiaries, contractors, partners... Version 2.0 will, when opening a graph, displayed by default the role of the entities in the legend.

### 3.11 Improved interactive company report

The lay-out of the interactive company reports has been improved. Some of the attributes on the screen are displayed differently, allowing making more easily a distinction between Orbis information and information sourced by the Managing Authority.

### **3.12 Improved printable report**

The printable reports have been reviewed. The number of attributes listed on the reports has been extended and the layout is improved. Printable reports for projects have become configurable.

### **3.13 Improved filtering options**

In Arachne version 1.2.4, the different filter screens are limited in number of attributes on which users can filter.

In version 2.0, each filter and search screen has been reviewed. Extra fields have been added, some became obsolete. Users have the possibility on all filter screens to save filters.

### **3.14 Improved dashboard and table configuration**

Via the parameters the user can specify the information he wants to see in some result grids. In version 2.0 some data have been added:

- In the dashboard configuration, project ID can be added in the project dashboard.
- In the default columns, the name of the project and the name and ID of the contractor can be added on the overview screen of expenses.
- Missing data fields in the export functionality have been added.

## 4 Annex

### 4.1 Changed risk calculation rules: details

#### 4.1.1 Individual alerts

In version 2.0, most of the indicators are calculated for every project type when the needed data is available. Besides this important modification, many risk calculation rules are subject to other changes, which are described in the following table.

<b>Procurement</b>	
Lead time between publication and contract signature	<ul style="list-style-type: none"> <li>• Calculation rule taking into account the minimum number of days between publication and contract signature.</li> <li>• Score depending on procurement type.</li> <li>• Calculation for all project types (if data available).</li> </ul>
Percentage disqualified tender offers vs received	<ul style="list-style-type: none"> <li>• Calculation for all project types (if data available).</li> </ul>
Number of valid tenders	<ul style="list-style-type: none"> <li>• If relevant information is not sourced, the score is not '0' but a grey bullet.</li> <li>• Calculation for all project types (if data available).</li> </ul>
Contracted amounts via restricted procedures / total project cost	<ul style="list-style-type: none"> <li>• Score taking into account the new procurement types</li> <li>• Calculation for all project types (if data available).</li> </ul>
Number of contract addenda compared to sector average	<ul style="list-style-type: none"> <li>• Calculation for all project types (if data available).</li> </ul>
Financial correction	<ul style="list-style-type: none"> <li>• Calculation for all project types (if data available).</li> </ul>
<b>Contract Management</b>	
Contract addenda cost vs project cost	<ul style="list-style-type: none"> <li>• Calculation for all project types (if data available).</li> </ul>
Contract addenda cost vs contracted amount	<ul style="list-style-type: none"> <li>• Calculation for all project types (if data available).</li> </ul>
Difference final contract end date and initial contract end date	<ul style="list-style-type: none"> <li>• Calculation for all project types (if data available).</li> </ul>
Number of consortium members	<ul style="list-style-type: none"> <li>• Calculation for all project types (if data available).</li> </ul>
Contract modifications	<ul style="list-style-type: none"> <li>• Calculation for all project types (if data available).</li> </ul>
Key experts change	<ul style="list-style-type: none"> <li>• Change of key expert doesn't has to be sourced anymore, this is detected automatically at each delivery of new contract data.</li> <li>• Calculation for all project types (if data available).</li> </ul>
Key experts linked to multiple projects	<ul style="list-style-type: none"> <li>• Use of overlapping periods (taking into account the period of involvement)</li> <li>• Increased granularity (score depending on number of involvements).</li> <li>• Calculation for all project types (if data available).</li> </ul>
High percentage of cost allocations within the last 60 days	<ul style="list-style-type: none"> <li>• Removed – merged with "High percentage of cost allocated during the last 14 days"</li> <li>• Calculation for all project types (if data available).</li> </ul>
Contracted amount vs annual turnover of the contractor	<ul style="list-style-type: none"> <li>• Use of ReferenceYear</li> <li>• Normalisation of the contracted amount</li> <li>• Priority is given to the Orbis turnover. If this info isn't available, the sourced Entity turnover is used instead.</li> <li>• Calculation for all project types (if data available).</li> </ul>
External service provider	<ul style="list-style-type: none"> <li>• Increased granularity (score depending on number of involvements).</li> <li>• Calculation for all project types (if data available).</li> </ul>
<b>Eligibility</b>	
Project costs outside eligibility period - before start date	<ul style="list-style-type: none"> <li>• Check performed not only on invoice date but also payment date.</li> </ul>
Project costs outside eligibility period - after	<ul style="list-style-type: none"> <li>• Check performed not only on invoice date but also payment date.</li> </ul>



end date	
Difference between invoice and payment dates	<ul style="list-style-type: none"> <li>No changes</li> </ul>
High percentage of cost allocated during the last 14 days	<ul style="list-style-type: none"> <li>Renamed to "High percentage of cost allocated at the end of the project"</li> <li>Calculation based on payment date. If payment date not available than based on invoice date.</li> <li>Also expenses with a payment (or invoice) date greater than the end date of the project are taken into account.</li> <li>Different rule for on the one hand ESF and SME projects (last 14 days) and on the other hand all other project types (last 60 days).</li> <li>Calculation for all project types (if data available).</li> </ul>
Expenses with round amounts	<ul style="list-style-type: none"> <li>For projects sourced in another currency than EUR, the check is performed before the conversion to EUR (on the original amount).</li> <li>The sum of the expenses with round amounts is compared to the total project cost instead of the total project expenses.</li> <li>Depending on the type of the project, the risk is only calculated if a certain percentage (Threshold) of expenses is already declared.</li> <li>Increased granularity (more different scores are possible, based on different percentages of expenses and on project type).</li> <li>Calculation for all project types (if data available).</li> </ul>
Duplicate amounts within expenses	<ul style="list-style-type: none"> <li>For projects sourced in another currency than EUR, the check is performed before the conversion to EUR (on the original amount).</li> <li>The sum of the expenses with duplicate amounts is compared to the total project cost instead of the total project expenses.</li> <li>Depending on the type of the project, the risk is only calculated if a certain percentage (Threshold) of expenses is already declared.</li> <li>Increased granularity (more different scores are possible, based on different percentages of expenses and on project type).</li> <li>Calculation for all project types (if data available).</li> </ul>
Negative expenses	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Beneficiaries with invalid VAT number	<ul style="list-style-type: none"> <li>Moved to Reputational Fraud Alerts.</li> <li>Check correspondence of the company name and the VAT number in the VIES database.</li> <li>Calculation for all project types (if data available).</li> </ul>
Suppliers with invalid VAT number	<ul style="list-style-type: none"> <li>Removed</li> </ul>
Project cost vs annual beneficiary turnover	<ul style="list-style-type: none"> <li>Removed – merged with "Diff. betw. project cost and annual turnover".</li> </ul>
Expenses higher than assistance	<ul style="list-style-type: none"> <li>Renamed to "Expenses higher than project cost".</li> <li>Expenses compared to the total project cost instead of EC assistance.</li> <li>Calculation for all project types (if data available).</li> </ul>
Contractors with invalid VAT number	<ul style="list-style-type: none"> <li>Moved to Contract Management.</li> <li>Check correspondence of the company name and the VAT number in the VIES database.</li> <li>Calculation for all project types (if data available).</li> </ul>
SubContractors with invalid VAT number	<ul style="list-style-type: none"> <li>Moved to Contract Management.</li> <li>Check correspondence of the company name and the VAT number in the VIES database.</li> <li>Calculation for all project types (if data available).</li> </ul>
Land expenses vs project cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> <li>Calculation also for SME and Other projects (if data available).</li> </ul>

Performance	
Number of people trained vs to be trained	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Hours of training provided vs to be provided	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Training hour cost incurred vs approved	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Number of additional personnel after project end vs as agreed	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Number of additional personnel as agreed vs as submitted	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Additional turnover at project end over additional turnover as agreed ratio	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Additional agreed turnover over submitted turnover ratio	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Project cost vs km road constructed	<ul style="list-style-type: none"> <li>Road construction type taken into account in the peer group definition.</li> </ul>
Project cost vs km rail constructed	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Project cost vs quantity of solid waste to be treated	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Quantity of solid waste treated vs to be treated	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Water waste cost vs population to benefit	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Water waste cost vs population benefiting	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Cost of sewage renovation vs km to be renovated	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Water supply cost vs population to benefit	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Water supply cost vs km to be renovated	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Project cost vs Energy decrease	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Project cost vs. Urban development	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Concentration	
Beneficiaries involved in multiple projects	<ul style="list-style-type: none"> <li>Use of overlapping periods (taking into account the period of involvement)</li> <li>The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>If the beneficiary is involved in a project in different qualifications (beneficiary and contractor and ...), the project counts only for 1.</li> <li>Increased granularity (score depending on number of involvements).</li> </ul>
Beneficiaries involved in multiple OPs	<ul style="list-style-type: none"> <li>Use of overlapping periods (taking into account the period of involvement)</li> <li>The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>If the beneficiary is involved in a project in different qualifications (beneficiary and contractor and ...), the project counts only for 1.</li> <li>Increased granularity (score depending on involvement in other DG's or MS's).</li> </ul>
Partners involved in multiple projects	<ul style="list-style-type: none"> <li>Use of overlapping periods (taking into account the period of involvement)</li> <li>The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>If the project partner is involved in a project in different</li> </ul>

	<p>qualifications (partner and beneficiary and ...), the project counts only for 1.</p> <ul style="list-style-type: none"> <li>• Increased granularity (score depending on number of involvements).</li> </ul>
Partners involved in multiple OPs	<ul style="list-style-type: none"> <li>• Use of overlapping periods (taking into account the period of involvement)</li> <li>• The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>• If the project partner is involved in a project in different qualifications (partner and beneficiary and ...), the project counts only for 1.</li> <li>• Increased granularity (score depending on involvement in other DG's or MS's).</li> </ul>
Contractors involved in multiple projects	<ul style="list-style-type: none"> <li>• Use of overlapping periods (taking into account the period of involvement)</li> <li>• The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>• If the contractor is involved in a project in different qualifications (contractor and beneficiary and ...), the project counts only for 1.</li> <li>• Increased granularity (score depending on number of involvements).</li> </ul>
Contractors involved in multiple projects of the beneficiary	<ul style="list-style-type: none"> <li>• Use of overlapping periods (taking into account the period of involvement)</li> <li>• The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>• If the contractor is involved in a project in different qualifications (contractor and beneficiary and ...), the project counts only for 1.</li> <li>• Increased granularity (score depending on number of involvements).</li> </ul>
Contractors involved in multiple OPs	<ul style="list-style-type: none"> <li>• Use of overlapping periods (taking into account the period of involvement)</li> <li>• The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>• If the contractor is involved in a project in different qualifications (contractor and beneficiary and ...), the project counts only for 1.</li> <li>• Increased granularity (score depending on involvement in other DG's or MS's).</li> </ul>
Related people linked to multiple projects	<ul style="list-style-type: none"> <li>• Use of overlapping periods (taking into account the period of involvement)</li> <li>• The rule also takes into account involvements in projects of other member states.</li> <li>• If the related person is involved in a project in different qualifications (related person and contractor and ...), the project counts only for 1.</li> <li>• Increased granularity (score depending on number of involvements).</li> <li>• Calculation for all project types (if data available).</li> </ul>
Consortium members involved in multiple projects	<ul style="list-style-type: none"> <li>• Use of overlapping periods (taking into account the period of involvement)</li> <li>• The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>• If the consortium member is involved in a project in different qualifications (consortium member and contractor and ...), the</li> </ul>

	<ul style="list-style-type: none"> <li>project counts only for 1.</li> <li>Increased granularity (score depending on number of involvements).</li> <li>Calculation for all project types (if data available).</li> </ul>
Consortium members involved in multiple projects of the beneficiary	<ul style="list-style-type: none"> <li>Use of overlapping periods (taking into account the period of involvement)</li> <li>The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>If the consortium member is involved in a project in different qualifications (consortium member and contractor and ...), the project counts only for 1.</li> <li>Increased granularity (score depending on number of involvements).</li> <li>Calculation for all project types (if data available).</li> </ul>
Subcontractors involved in multiple projects	<ul style="list-style-type: none"> <li>Use of overlapping periods (taking into account the period of involvement)</li> <li>The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>If the subcontractor is involved in a project in different qualifications (subcontractor and contractor and ...), the project counts only for 1.</li> <li>Increased granularity (score depending on number of involvements).</li> <li>Calculation for all project types (if data available).</li> </ul>
Subcontractors involved in multiple projects of the beneficiary	<ul style="list-style-type: none"> <li>Use of overlapping periods (taking into account the period of involvement)</li> <li>The rule also takes into account involvements in projects of other member states as well as involvements in other projects but with a different role.</li> <li>If the subcontractor is involved in a project in different qualifications (subcontractor and contractor and ...), the project counts only for 1.</li> <li>Increased granularity (score depending on number of involvements).</li> <li>Calculation for all project types (if data available).</li> </ul>
Supervision contractor multiple times in same constellation with work contractors	<ul style="list-style-type: none"> <li>The rule also takes into account involvements in projects of other member states.</li> <li>Increased granularity (score depending on number of involvements).</li> <li>Calculation for all project types (if data available).</li> </ul>
<b>Other / Reasonability</b>	
EC financial assistance vs project cost	<ul style="list-style-type: none"> <li>No changes</li> </ul>
EC financial assistance vs project income	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
EC financial assistance vs other contributions	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Personnel cost vs project cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Fixed assets vs project cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Administration cost vs project cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Representation and travel cost vs project cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Supplies costs vs project cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Seminars-publishing cost vs project cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Research cost vs project cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Other costs vs project cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Exceptional costs vs project cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>
Fixed assets vs personnel cost	<ul style="list-style-type: none"> <li>Calculation for all project types (if data available).</li> </ul>

EC financial assistance vs turnover of the beneficiary	<ul style="list-style-type: none"> <li>• Use of ReferenceYear</li> <li>• Normalisation of the EC financial assistance</li> <li>• Priority is given to the Orbis turnover. If this info isn't available, the sourced ApplicationTurnover or Entity turnover is used instead.</li> <li>• Calculation for all project types (if data available).</li> </ul>
Overall EC financial assistance vs turnover of the beneficiary	<ul style="list-style-type: none"> <li>• Use of ReferenceYear</li> <li>• Normalisation of the EC financial assistance</li> <li>• Priority is given to the Orbis turnover. If this info isn't available, the sourced ApplicationTurnover or Entity turnover is used instead.</li> <li>• Calculation for all project types (if data available).</li> </ul>
Project cost vs turnover	<ul style="list-style-type: none"> <li>• Removed – merged with "Diff. betw. project cost and annual turnover" in Reputational &amp; Fraud Alerts.</li> </ul>
<b>Reputational &amp; Fraud Alerts</b>	
<b>Financial</b>	
High or deteriorating propensity to bankruptcy	<ul style="list-style-type: none"> <li>• Decreased weight: maximum score of 20 instead of 40.</li> <li>• Simplified rule: score is equal to the VPI bankruptcy score (and no more depending on the score of the previous year).</li> </ul>
High or deteriorating rating compared to sector benchmark	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
High financial ratings of associated companies	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
Non filing of annual accounts	<ul style="list-style-type: none"> <li>• Fine-tuning of scoring with use of ReferenceYear.</li> <li>• No scoring for companies with entity type S (public authorities / states / governments).</li> </ul>
Diff. betw. project cost and annual turnover	<ul style="list-style-type: none"> <li>• Use of ReferenceYear</li> <li>• Normalisation of the project cost</li> <li>• Priority is given to the Orbis turnover. If this info isn't available, the sourced ApplicationTurnover or Entity turnover is used instead.</li> </ul>
Project cost vs number of employees	<ul style="list-style-type: none"> <li>• Use of ReferenceYear</li> <li>• Normalisation of the project cost</li> <li>• Priority is given to the Orbis number of employees. If this info isn't available, the sourced ApplicationPersonnel is used instead.</li> </ul>
<b>Relationship</b>	
Links between beneficiaries/project partners	<ul style="list-style-type: none"> <li>• Increased granularity (score depending on number of links).</li> </ul>
Links between beneficiaries/project partners and contractors/Consortium members	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
Links between beneficiaries/project partners and sub-contractors	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
Links between contractors/consortium members	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
Links between contractors/consortium members and sub-contractors	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
Directors/shareholders with high number of mandates	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
Registration of multiple companies on the same address	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
<b>Reputational</b>	
Involvement of directors/shareholders with bankruptcies	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
Involvement of directors/shareholders from sensitive regions	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
Incorporation in sensitive regions	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
Group involvement in sensitive regions	<ul style="list-style-type: none"> <li>• No changes</li> </ul>

Inconsistent activities	<ul style="list-style-type: none"> <li>No changes</li> </ul>
Use of PO box address	<ul style="list-style-type: none"> <li>No changes</li> </ul>
<b>Sanction</b>	
Involvement in PEP lists	<ul style="list-style-type: none"> <li>Check presence in the WorldCompliance database also for related people and for key experts.</li> </ul>
Involvement in sanction lists	<ul style="list-style-type: none"> <li>Check presence in the WorldCompliance database also for related people and for key experts.</li> </ul>
Involvement in enforcement lists	<ul style="list-style-type: none"> <li>Check presence in the WorldCompliance database also for related people and for key experts.</li> </ul>
Involvement in adverse media	<ul style="list-style-type: none"> <li>Check presence in the WorldCompliance database also for related people and for key experts.</li> </ul>
<b>Change</b>	
Newly created company	<ul style="list-style-type: none"> <li>The company age is calculated based on the start date of the validation period instead of the current date.</li> </ul>
New shareholders/directors	<ul style="list-style-type: none"> <li>Instead of tracing changes in the past three years, this check will look for changes having taken place in the validation period.</li> </ul>
High rotation of directors	<ul style="list-style-type: none"> <li>Instead of tracing changes in the past three years, this check will look for changes having taken place in the validation period.</li> </ul>
Activity changes	<ul style="list-style-type: none"> <li>Instead of tracing changes in the past three years, this check will look for changes having taken place in the validation period.</li> </ul>
Address changes	<ul style="list-style-type: none"> <li>Instead of tracing changes in the past three years, this check will look for changes having taken place in the validation period.</li> </ul>
Name changes	<ul style="list-style-type: none"> <li>Instead of tracing changes in the past three years, this check will look for changes having taken place in the validation period.</li> </ul>

#### 4.1.2 Categorical alerts

Besides the calculation rules for individual risk scores, also the overall score calculations have been adapted:

Category	Version 1.2.4	Version 2.0
Procurement	A score on 50 is calculated based on the average of the 3 individual alerts with the highest scores.	$(\text{sum of top 3 available risk scores} / 30) * 50$
Contract management	A score on 50 is calculated based on the average of the 3 individual alerts with the highest scores.	$(\text{sum of top 5 available risk scores} / \text{sum of top 5 available alerts weights (min 30)}) * 50$
Eligibility	A score on 50 is calculated based on the average of all individual alerts.	$(\text{sum of top 5 available risk scores} / \text{sum of top 5 available alerts weights (min 30)}) * 50$
Performance	A score on 50 is calculated based on the average of all individual alerts.	$(\text{sum of available risk scores} / \text{sum of available alerts weights}) * 50$
Concentration	A score on 50 is calculated based on the average of all individual alerts.	$(\text{sum of top 5 available risk scores} / \text{sum of top 5 available alerts weights, (min30)}) * 50$
Other / Reasonability	A score on 50 is calculated based on the average of the 3 individual alerts with the highest scores.	<ul style="list-style-type: none"> <li><math>(\text{sum of top 5 available risk scores} / \text{sum of top 5 available alerts weights, (min30)}) * 50</math></li> <li>Renamed from 'Other' to 'Reasonability'</li> </ul>
Reputational & Fraud	A score on 50 is calculated based on the average of all individual alerts.	$(\text{sum of top 10 available risk scores} / \text{sum of top 10 available alerts weights}) * 50$
Overall	The overall score is the average of the scores of the categorical alerts mentioned above.	The overall score is the average of the scores of the categorical alerts mentioned above.